## II. CLAIM AMENDMENTS

1. (Currently Amended) Substituted 1-phenethylpiperidine compounds of the general formula I

$$R^1$$
 $R^2$ 
 $R^3$ 

in which

X denotes a methylene (CH<sub>2</sub>) or carbonyl (C=O) group,

R¹ denotes an optionally at least mono-substituted aryl or heteroaryl residue,

 $R^2$  denotes H,  $COR^5$ ,  $SO_2R^5$ , an optionally at least mono— substituted, saturated, branched or unbranched aliphatic  $C_{1-10}$  residue, an optionally at least mono-substituted, at least mono-unsaturated, branched or unbranched aliphatic  $C_{2-10}$  residue, an optionally at least mono-substituted, saturated or at least mono-unsaturated cycloaliphatic  $C_{3-8}$  residue, an optionally at least mono-substituted aryl or heteroaryl residue or an optionally at least mono—substituted aryl or heteroaryl residue attached via a  $C_{1-3}$  alkylene group,  $R^3$  and  $R^4$  each separately denote H or together denote a bond,

 $R^5$  denotes an optionally at least mono—substituted, saturated, branched or unbranched aliphatic  $C_{1-10}$  residue, an optionally at least mono-substituted, at least mono-unsaturated, branched or unbranched aliphatic  $C_{2-10}$  residue, an optionally at least mono—substituted, saturated or at least mono-unsaturated cycloaliphatic  $C_{3-8}$  residue, an optionally at least mono-substituted aryl or heteroaryl residue or an optionally at least mono—substituted aryl or heteroaryl residue attached via a  $C_{1-3}$  alkylene group,

as a free base or a corresponding physiologically acceptable salt and corresponding racemates, enantiomers and diastereomers.

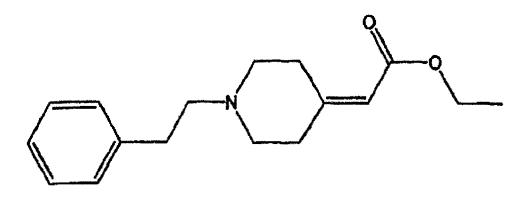
- 2. (Original) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that X denotes a methylene ( $CH_2$ ) group.
- 3. (Currently Amended) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that R1 denotes an optionally at least mono—substituted aryl residue.
- 4. (Currently Amended) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that  $R^2$  denotes H,  $COR^5$ ,  $SO_2R^5$  or denotes a  $C_{1-6}$  alkyl residue, preferably denotes H or  $COR^5$ .
- 5. (Currently Amended) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that the residues R<sup>3</sup> and R<sup>4</sup> each denote H.
- 6. (Currently Amended) Substituted 1-phenethylpiperidine compounds according to claim 1, characterised in that the residue  $R^5$  denotes a  $C_{1-6}$  alkyl residue or denotes an unsubstituted or at least mono-substituted aryl residue.
- 7. (New) Substituted 1-phenethylpiperidine compounds according to claim 8, where

the R<sup>5</sup> denotes a C<sub>1-6</sub> alkyl.

- 8. (Currently Amended) A process for the production of substituted 1-phenethylpiperidine compounds of the general formula I according to claim 1, characterised in that
- (a) 1-phenethylpiperidin-4—one of the formula II

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is reacted with triethyl phosphonoacetate in solution to yield (I-phenethylpiperidin-4-ylidene)-ethyl acetate of the formula III



and this is optionally purified in accordance with conventional methods and/or

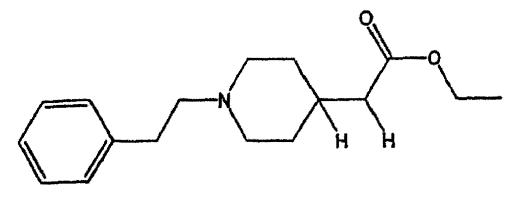
optionally isolated in accordance with conventional methods,

(b) optionally the (1—phenethylpiperidin-4-ylidene)—ethyl acetate of the formula III is converted in accordance with conventional methods into a compound of the general formula IV,

IV

in which Z denotes a group which activates the carbonyl carbon atom for reaction with an amine, the compound of the general formula IV thus obtained is optionally purified in accordance with conventional methods and/or optionally isolated in accordance with conventional methods,

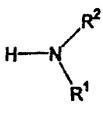
(c) optionally at least one of the compounds of the formula III or IV in solution is reduced to yield a corresponding compound of the general formula III'



or to yield a corresponding compound of the general formula  $\ensuremath{\mathrm{IV}}'$ 

and the corresponding compound is optionally purified in each case in accordance with conventional methods and/or optionally isolated in each case in accordance with conventional methods,

(d) at least one compound of the formula III, III', IV and IV' in solution is reacted with a primary or secondary amine of the general formula  $V_{i}$ 



V

in which  $R^1$  and  $R^2$  have the meaning according to the above-stated general formula I, to yield at least one compound of the general formula Id

$$\mathbb{R}^1$$

ld

and/or at least one compound of the general formula  $\operatorname{Id}'$ 

ld"

and this is optionally purified in each case in accordance with conventional methods and/or optionally isolated in each case in accordance with conventional methods,

(e) optionally at least one of the compounds of the general formula Id and/or Id' is converted by reduction in solution into at least one compound of the general formula Ie

$$CH_2-N$$
 $R^1$ 
 $R^2$ 

le

and/or at least one compound of the general formula Ie'

18'

in which  $R^1$  and  $R^2$  each have the meaning according to claim 1, and this is optionally purified in each case in accordance with conventional methods and/or optionally isolated in each case in accordance with conventional methods,

- (f) optionally at least one compound of the general formula Ie and/or Ie', in which the residue  $R^2$  denotes H, is converted in accordance with conventional methods known to the person skilled in the art into at least one compound of the general formula Ie and/or Ie', in which the residue  $R^2$  denotes  $COR^5$ ,  $SO_2R^5$ , an optionally at least mono—substituted, saturated, branched or unbranched aliphatic  $C_{1-10}$  residue, an optionally at least mono—unsaturated, branched or unbranched aliphatic  $C_{2-10}$  residue, an optionally at least mono-substituted or at least mono-unsaturated cycloaliphatic  $C_{3-8}$  residue, an optionally at least mono-substituted aryl or heteroaryl residue or denotes an optionally at least mono-substituted aryl or heteroaryl residue attached via a  $C_{1-3}$  alkylene group, wherein the residue  $R^5$  has the above—stated meaning and this is optionally purified in accordance with conventional methods and/or optionally isolated in accordance with conventional methods.
- 9. (Currently Amended) A process according to claim 8, characterised in that Z denotes OH, Cl or a succinimide residue.
- 10. (Currently Amended) A process according to claim 8, characterised in that the reduction to yield the compounds of formula III' or IV' is performed with hydrogen in the presence of a transition metal catalyst, preferably in the presence of palladium powder.
- 11. (Currently Amended) A process according to claim 8, characterised in that the reaction with a primary or secondary amine of the general formula V is performed in the presence of n—butyllithium.

- 12. (Currently Amended) A process according to claim 8, characterised in that reduction to yield a compound of the <del>general</del> formula Ie or Ie' proceeds with aluminium hydride (alane) produced in situ from lithium aluminium hydride and aluminium trichloride in an organic solvent.
- 13. (Previously Presented) A pharmaceutical preparation containing at least one substituted 1-phenethylpiperidine compound according to claim 1 and optionally physiologically acceptable auxiliary substances.

## 14-23. Cancelled

- 24. (Currently Amended) A method of Use of at least one substituted 1—phenethylpiperidine compound according to claim 1 to produce a pharmaceutical preparation for the combatting of pain, or treating for the treatment of migraine, diarrhoea, urinary incontinence, pruritus, inflammatory reactions, allergic reactions, dependency on alcohol and/or drugs and/or medicines, abuse of alcohol and/or drugs and/or medicines, inflammation or for local anesthesia comprising administering to a patient in need thereof of an effective amount of a-pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.
- 25. (New) A compound of claim 1 selected from the group consisting of [2-(I-Phenethylpiperidin-4-yl-)ethyl]phenylamine,
- (4-Methoxyphenyl)-[2-(1-phenethylpiperidin-4-yl)ethyl]amine,
- 2-[2-(I-Phenethylpiperidin-4-yl)ethylamino]phenol,
- [2-(1-Phenethylpiperidin-4-yl)ethyl]-(3-trifluoromethylphenyl)amine,
- (3-Methoxyphenyl)-[2-(1-phenethylpiperidin-4-yl)ethyl]amine,
- 4-[2-(1-Phenethylpiperidin-4-yl)ethylamino]phenol,
- (4-Chloro-2-fluorophenyl)-[2-(1-phenethylpiperidin-4-yl) ethyl]amine,
- 3-[2-(I-Phenethylpiperidin-4-yl)ethylamino]phenol,

- N-(3-Chloro-4-methoxyphenyl)-N-[2-(1-phenethylpiperidin-4-yl) ethyl]acetamide,
- N-(3-Chloro-4-methoxyphenyl)-N-[2-(1-phenethylpiperidin-4-yl) ethyl] propionamide,
- N-(3-Chloro-4-methoxyphenyl)-N-[2-(1-phenethylpiperidin-4-yl)ethyl]benzamide,
- N-[2-(1-Phenethylpiperidin-4-yl)ethyl]-N-(3-trifluoromethylphenyl)acetamide,
- N-[2-(1-Phenethylpiperidin-4-yl)ethyl]-N-phenylacetamide,
- N-[2-(1-Phenethylpiperidin-4-yl)ethyl]-N-phenylbenzamide,
- (4-Methylpyridin-2-yl)-[2-(1-phenethyl-piperidin-4-yl)-ethyl]amine and
- (4,6-Dimethyl-pyridin-2-yl)-[2-(1-phenethylpiperidin-4-ylidene)-ethyl] amine.
- 27. (New) A method of\_combatting pain comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.
- 28. (New) A method of treating migraine comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.
- 29. (New) A method of treating diarrhoea comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.
- 30. (New) A method of treating urinary incontinence comprising administering to a patient in need thereof of a therapeutically effective amount of a-pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.

- 31. (New) A method of treating pruritus comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.
- 32. (New) A method of treating inflammatory reactions comprising administering to a patient in need thereof of a therapeutically effective amount of a-pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.
- 33. (New) A method of treating allergic reactions comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.
- 34. (New) A method of treating dependency on alcohol and/or drugs and/or medicines, or abuse of alcohol and/or drugs and/or medicines, comprising administering to a patient in need thereof of an effective amount of a-pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.
- 35. (New) A method of treating inflammation comprising administering to a patient in need thereof of a therapeutically effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.
- 36. (New) A method of local anesthesia comprising administering to a patient in need thereof of an effective amount of a pharmaceutical preparation comprising at least one substituted 1—phenethylpiperidine compound according to claim 1.